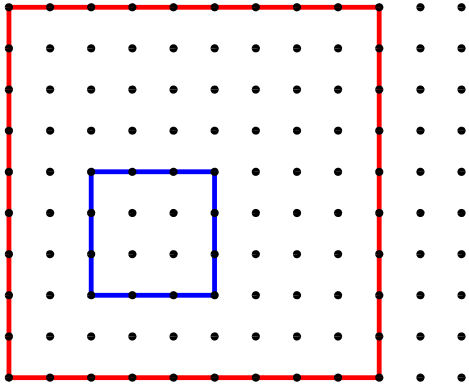


Worksheet 14.6: Dilations

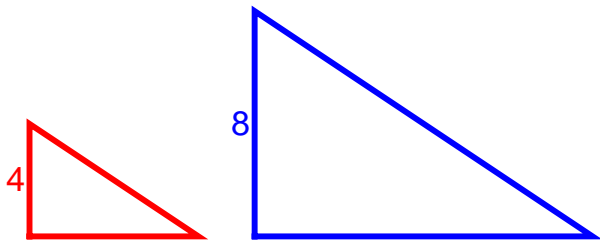
The blue figure is a dilation image of the red figure.

- Determine whether the dilation is a reduction or an enlargement.
- Find the scale factor.

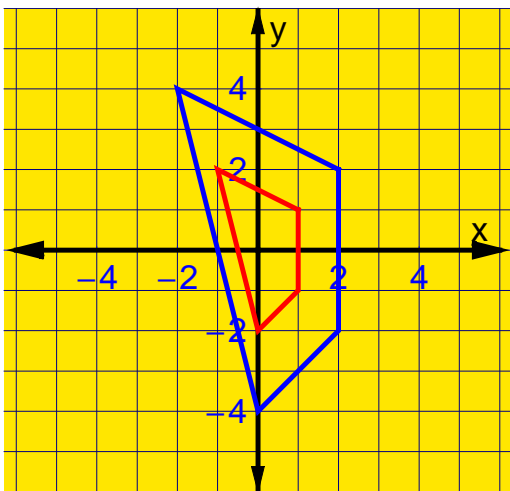
1.



2.



3.



4. In the movie, *King Kong*, Kong is 60 feet tall. If an average gorilla is 5 feet tall, what is the scale factor of this enlargement? If an average gorilla weighs 350 lbs, how much does Kong weigh?

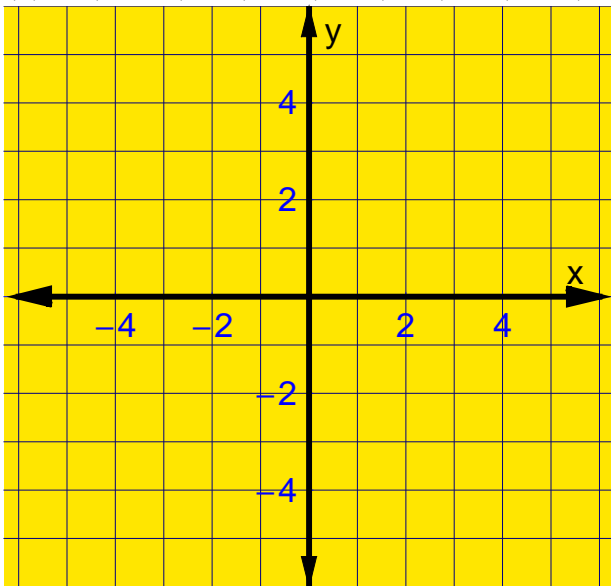
5. A regular triangle with 6-in. sides undergoes a dilation with a scale factor of 3:7.

(a) What are the side lengths of the image?

(b) What are the angle measures of the image?

Graph EZAB and its image E'Z'A'B' under a dilation with center $(0, 0)$ and the given scale factor.

(a) $E(-2, -2)$, $Z(1, -2)$, $A(1, 2)$, $B(-1, 3)$; scale factor 2



(b) E(-6, 6), Z(-4, -4), A(4, -2), B(2, 4): scale factor $\frac{1}{2}$.

